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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/404,313	09/24/1999	TATSUHIKO AMAGAI	Q055935	8283

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EXAMINER

HARPER, KEVIN C

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/404,313

Applicant(s)

AMAGAI ET AL.

Examiner

Kevin C. Harper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-23, 25-31, 33 and 34 is/are allowed.
- 6) ☒ Claim(s) 24 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Response to Arguments

Applicant's arguments filed January 18, 2006 concerning the Yokoyama reference have been fully considered but they are not persuasive. Applicant argued that Yokoyama does not disclose a multi-port shared memory for reading a header portion by a lower layer processing portion and reading a header portion by a higher layer processing portion. However, data stored in the memory (fig. 8, item 30) at packet reception is used by a layer 2 processor (fig. 13, step 1031; col. 10, lines 12-15) and by a layer 3 processor (fig. 14, step 1038; col. 9, line 67 through col. 10, line 3).

Applicant's arguments filed January 18, 2006 concerning the combination of references have been fully considered and are persuasive. The previous rejection of the claims has been withdrawn.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 24 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama et al. (US 5,303,344) in view of Sommani et al. (US 4,910,733).

1. Regarding claims 24 and 32, Yokoyama discloses a packet exchange (fig. 8) for exchanging packet data (figs. 7 and 10) through several OSI layers. The exchange comprises a multi-port shared memory (item 30) for storing part of each packet used in the process of a layer 2 and layer 3 processing portions (col. 7, lines 30-32; fig. 8, items 100-3 and 100-2; fig. 12), where the processing portions access the same memory space (fig. 10, item 32; col. 7, lines 31-

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32) of the multi-port shared memory. A pipeline processing system is used so that the processing portions access the same memory space without an interference (figs 12-14; note: the processing portions are not involved in contention in accessing the memory - col. 9, lines 3-20; col. 9, lines 48-53 and line 61 through col. 10, line 5). Further regarding claim 32, the exchange further comprises a processor (fig. 8, item 100-1) connected to the layer 2 and layer 3 processing portions for executing a process above layer 3.

2. However, Yokoyama does not disclose a packet memory for storing an entire packet. Sommani discloses a packet memory for storing an entire packet (fig. 1, item 20). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a packet memory for storing an entire packet in the invention of Yokoyama in order to temporarily store received data packets for later processing as is known in the art.

Allowable Subject Matter

Claims 14-23, 25-31 and 33-34 are allowed.

Conclusion

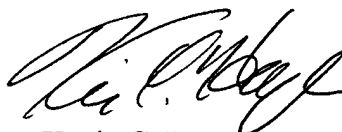
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To, can be reached at 571-272-7629. The centralized fax number for the Patent

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Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Kevin C. Harper', is positioned above the printed name.

Kevin C. Harper

April 29, 2006